

AMENDMENTS TO THE CLAIMS

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. The listing of Claims below assumes that the amendments introduced in the August 7, 2008 response have been entered.

Listing of the Claims:

Claim 1-16 (canceled).

Claim 17 (previously presented): A service vehicle for performing an in-space operation on a selected target spacecraft, comprising:

 a communication module having at least one of a transmission and a receiving characteristic configurable in order to meet at least one of a transmission and a receiving parameter of the selected targeted spacecraft; and

 a control module configured to provide a setpoint for an output power of the communication module.

Claim 18 (previously presented): The service vehicle as recited in claim 17, wherein the communication module includes a transmitter.

Claim 19 (previously presented): The service vehicle as recited in claim 17, wherein the communication module includes a configurable receiver.

Claim 20 (previously presented): The service vehicle as recited in claim 19, wherein the receiver has a working frequency that is adjustable in so as to enable communication with a telemetry channel of the selected target spacecraft.

Claim 21 (canceled).

Claim 22 (currently amended): The service vehicle as recited in claim ~~21~~17, further comprising a first position sensor connected to an input portion of the control module, the first position sensor delivering a set of data indicative of a current position of the service vehicle.

Claim 23 (previously presented): The service vehicle as recited in claim 22, further comprising a second position sensor connected to the input portion of the control module, the second position sensor delivering a set of data indicative of a current position of the target spacecraft.

Claim 24 (currently amended): The service vehicle as recited in claim ~~21~~22, further comprising an orientation sensor connected to the input portion of the control module, the orientation sensor delivering a set of data indicative of a current orientation of the target spacecraft relative to the service vehicle.

Claim 25 (previously presented): The service vehicle as recited in claim 17, further comprising a docking system having a hollow first axle and a second axle moveably disposed inside the first axle, the second axle carrying an activateable arrow tip.

Claim 26 (previously presented): The service vehicle as recited in claim 17, further comprising an identification device configured to identifying said target spacecraft.

Claim 27 (previously presented): A servicing system for providing in-space service operations to a selected target spacecraft, comprising:

a service vehicle that includes a communication module having at least one of a transmission and a receiving characteristic configurable in order to meet at least one of a transmission and a receiving parameter of the selected targeted spacecraft;

a control module configured to provide a setpoint for an output power of the communication module; and

a ground control module for delivering operational commands to the service vehicle.

Claim 28 (previously presented): The servicing system as recited in claim 27, wherein the ground control module is configured to receive data from the service vehicle using the target spacecraft as a relay station for signals emitted from the service vehicle.

Claim 29 (previously presented): The servicing system as recited in claim 27, further comprising an orbit-based utility base for said service vehicle.

Claim 30 (previously presented): The servicing system as recited in claim 27, further comprising a relay module for forwarding transmitted signals to the service vehicle.

Claim 31 (previously presented): The servicing system as recited in claim 27, further comprising an engine module attachable to at least one of a service agent, the service vehicle, and the target spacecraft.

Claim 32 (previously presented): A method for in-space servicing of a selected target space-craft, the method comprising:

performing an in-space operation on the target spacecraft using a service vehicle having a communication module that includes at least one of a transmission and a receiving characteristic configurable in order to meet at least one of a transmission and a receiving parameter of the selected targeted spacecraft, and having a control module configured to provide a setpoint for an output power of the communication module; and

relaying command signals to the service vehicle using a telemetry channel disposed between a ground control module and the target spacecraft.